CLAIMS

- 1. A voice coil motor of the movable coil type comprising:
- a stator of a permanent magnet which becomes a magnetic field; and
 - a movable element of an armature coil, wherein
- the armature coil is formed into a coil-shape having a cavity portion, and
- a reinforcing beam made of non-magnetic and highly rigid material is formed at a substantial center of the cavity portion.
- 2. A voice coil motor of the movable coil type comprising:
- a stator of a permanent magnet which becomes a magnetic field; and
 - a movable element of an armature coil, wherein
- a highly rigid reinforcing member, the shape of which is the same as the coil section, is arranged at an end face of the coil.
- 3. A voice coil motor of the movable coil type comprising:
- a stator of a permanent magnet which becomes a magnetic field; and
- a movable element of an armature coil, wherein the armature coil is formed into a coil-shape having a cavity portion,
- a reinforcing beam made of non-magnetic and highly rigid material is formed at a substantial center of the cavity portion, and
- a highly rigid reinforcing member, the shape of which is the same as the coil section, is arranged at an end face of the coil.